

Danner, Ward

From: Santos, Carmen
Sent: Wednesday, January 21, 2015 4:52 PM
To: 'Tim Simon'; 'Kalve, Erica'
Cc: 'Tan, Angeline'; 'Wickham, Jerry, Env. Health'
Subject: FW: PCBs: Aspire Public School 1009 66th Avenue, Oakland, California - EPA R9 Approval Cap Modification
Attachments: PCBs: Aspire Public School 1009 66th Avenue, Oakland, California - EPA R9 Approval Cap Modification

Hello Tim and Erica:

This is a follow up to the January 6, 2015 TSCA PCB approval for modification of the cap at the Aspire school. Below is the formula to calculate an acceptable dust in air volume to assure that PCB levels in air dust is below health-based risk levels. Please call me if you have any questions concerning the formula included below.

“Real-time dust monitoring should be used to assure that PCB levels in dust in air are maintained below risk-based levels. Real-time dust monitoring should be continuous during demolition operations and performed at locations that include those representative of potential maximum off-site dust concentrations. Real-time “background” dust-in-air concentrations may be subtracted from site-related measurements when determining compliance with risk-based limits on dust-in-air concentrations. “Background” dust-in-air concentrations must be measured in real time and compared to real time dust-in-air concentrations at “downwind” monitoring locations. Response to exceedances of project-related dust-in-air limits should be performed promptly.

Acceptable level of dust in air based on PCB concentration of 1 mg/kg in dust source may be calculated as follows, EPA will consider proposals for the use of other methods.

$$C_{da} = RfCd \times 1E9 / C_{ca}$$

Where

C_{da} = concentration of dust in air (ug/m³)
 $RfCd$ = Derived inhalation reference concentration (mg/m³)
 C_{ca} = Allowable PCB concentration in concrete (1 mg/kg)
 $1E9$ = Unit conversion factor (ug/kg)

No inhalation RfC is published in IRIS, and so must be derived ($RfCd$) from the oral reference dose:

$$RfCd = RfDo \times BW / IR$$

Where

$RfDo$ = Oral reference dose (2E-5 mg/kg-da)
 BW = Body weight (15 kg) (body weight used to develop soil RSLs)
 IR = Inhalation rate (10 m³/day) (corresponds to body weight in EFH Tables 6-1 and 8-1)

Any air sampling for TO-10 analysis should use the nominally optional glass-fiber filter in the sample collection train. The glass-fiber filter and PUF sorbent should be analyzed separately for each air sample.”

Thank you for your courtesies.

Sincerely,
Carmen

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"Think left and think right and think low and think high. Oh, the thinks you can think up if only you try!" Dr. Seuss

Before printing this message and/or attachments, think if it is necessary. Think Green.

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